91 00240

[East Bay Municipal Utilities District]

MODEL ORDINANCE

LANDSCAPE REQUIREMENTS FOR NEW CONSTRUCTION

AN ORDINANCE OF THE COUNCIL OF THE CITY OF _____, CALIFORNIA, AMENDING SECTION ___ OF THE MUNICIPAL CODE OF THE CITY OF _____ TO ESTABLISH LANDSCAPE DESIGN AND DEVELOPMENT REQUIREMENTS FOR THE PURPOSE OF ASSISTING NEW DEVELOPMENTS WITHIN THE CITY OF _____ IN THE DESIGN AND MANAGEMENT OF LANDSCAPING.

Introduced by Councilmember _____.
Seconded by Councilmember _____.

SECTION I

TITLE

This ordinance shall be known as the "Landscape Ordinance".

SECTION 2

PURPOSE

WHEREAS, water is a limited resource, particularly in dry years, and must be managed and used efficiently; and

WHEREAS, precipitation in California fluctuates annually causing yearly variations in the water supply as demonstrated by water supply shortages experienced in the East Bay Municipal Utility District service area in six of the last fourteen years; and

WHEREAS, state and local standards for water use have been established in regard to other water uses, including indoor plumbing fixtures; and

WHEREAS, in addition to these water-conserving efforts, landscapes should be designed based on the functional use of the landscape and appropriate horticulture, by including plants best suited for the climate; and

WHEREAS, cities as water users can provide leadership in water conserving landscape and irrigation practices, and a more comprehensive water savings can be achieved if the City adopts landscape requirements for use in its own landscape irrigation activities; and

WHEREAS, such landscape requirements do not increase the cost of landscaping when computed over the life of the development and do not diminish the aesthetic quality of the landscaping; and

WHEREAS, outdoor landscaping consumes approximately 25% of water used in the East Bay Municipal Utility District service area, and it is well established that frequent overwatering of landscaping can be avoided through appropriate use of plant materials, efficient irrigation systems and good landscape management practices.

SECTION 3
LANDSCAPE REQUIREMENTS

The Council of the City of _____ do ordain as follows:

Chapter ___ Article ___ Section ___ of the Municipal Code of the City of _____ is hereby amended to read as follows:

CHAPTER ___ WATER CONSERVATION

ARTICLE ___ LANDSCAPE REQUIREMENTS FOR NEW CONSTRUCTION
Sec. ___ Requirements Adopted. The following requirements for water conservation are hereby made part of this code.

A. <u>General</u>

Landscape plans shall be submitted for review as to conformance with these requirements. The Applicant shall allow a minimum of 30 days for each review of landscaping plans and each re-review in the case of non-conformance with these requirements. Landscaping shall not be installed until the Applicant receives acceptance of the landscape plans. Maintenance of the landscaping in accordance with the plan accepted shall be a condition of continued water service to the premises.

All ornamental uses of water in the common areas of a development project, such as ponds, lakes, and fountains, shall be supplied, operated, and maintained with alternative sources of water if they are available.

B. Applicability

The requirements are applicable to:

1. All landscaping for new construction, including
   - o Residential (single & multi-family)
   - o Model Homes or Temporary Development
   - o Commercial
   - o Industrial
   - o Public Authorities

The requirements do not apply to sites using reclaimed water.

C. Plant Selection

1. At least 90% of the plants selected in non-turf areas shall be well-suited to the climate of the region and require minimal water once established. Up to 10% of the plants may be of a non-drought tolerant variety as long as they are grouped together and can be irrigated separately.

D. Turf Limitations

1. The combined turf and/or water area (i.e., pools, ponds and fountains) shall be limited to 25% of the irrigated areas. Exceptions may be granted when using drought tolerant turfgrasses. Turf and/or water area limitation is excluded for public parks, golf courses, cemeteries and school recreation areas.

E. Soil Conditioning and Mulching

1. A minimum of six (6) cubic yards of nitrofied soil conditioner per 1000 square feet shall be incorporated into the top six inches of soil.

2. A minimum of 2 inches of mulch shall be added in non-turf areas to the soil surface after planting. Non-porous material shall not be placed under the mulch.

3. Grading shall be minimized to avoid disturbance. Top soil shall be stockpiled and shall be reapplied during final grading.

F. Irrigation

These irrigation requirements apply to all non-single family residential landscapes and to those single family residences where automatic and semi-automatic irrigation systems will be installed.

1. Sprinkler heads with a precipitation rate of .85" per hour or less shall be used on slopes exceeding 15% or on slopes exceeding 10% within 10 feet of hardscapes to minimize runoff.

2. Valves and circuits shall be separated based on water use.

3. Drip or bubbler irrigation systems are required for trees. Bubblers shall be used that do not exceed 1.5 gallons per minute per device.

4. Sprinkler heads must have matched precipitation rates within each control valve circuit.

5. Check valves are required where elevation differences may cause low head drainage.

6. Sprinkler head spacing shall be designed for head to head coverage. The system should be designed for minimum runoff and overspray onto non-irrigated areas.

7. All automatic irrigation systems shall be equipped with a controller capable of dual or multiple programming. Controllers must have multiple cycle start capacity and a flexible calendar program.

8. All irrigation systems shall be equipped with rain shut-off devices.

G. **Additional Requirements**

These additional requirements apply to all landscaping for new construction except single family residences.

1. No turf shall be allowed:

   a. In median strips.
   b. In areas less than eight (8) feet wide.

2. Sprinklers

   Sprinklers and sprays shall not be used in areas less than eight (8) feet wide.

3. Soil Conditioning and Mulching

   Soil tests showing soil type, soil depth, uniformity and PH shall be required and submitted with landscape plans. Soil will be amended according to report recommendations.

4. Irrigation

   Plans shall include a water budget that includes:

   a. Estimated annual water use (in gallons).

   b. Irrigated area (in square feet).

   c. A monthly irrigation schedule for the plant establishment period and the following year. This irrigation schedule will include the following information for each valve.

      - plant type
      - precipitation rate
      - flow rate in gallons per minute
      - run times in minutes per day
      - number of watering days per week (Turfgrasses should be irrigated a maximum of once every three days).

The following schedule shows how many inches of water turfgrass needs monthly, based upon climatic data for Inland and Coastal areas.

Date	Inches/Month Inland	Coastal	Date	Inches/Month Inland	Coastal
January	0	0	July	7.0	4.5
February	0	0	August	6.5	4.5
March	1.5	1.0	September	5.0	4.0
April	3.0	3.0	October	2.0	1.5
May	5.5	3.0	November	0.5	0
June	6.5	5.0	December	0	0

SECTION 4
ADOPTION

WHEREAS, the Planning Department of the City of _____ _____ reviewed the proposed requirements, and recommended that the Landscape Requirements be incorporated into the Design Review Process, and that the Department be authorized to amend the requirements as necessary to facilitate implementation or to adjust to advances in the field of water conservation.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of _____ does hereby adopt and incorporate the Landscape Requirements, and authorizes the Planning Department to implement and amend these requirements as necessary to conserve water and ensure quality landscaping, and to notify the County and the East Bay Municipal Utility District of this action.

PASSED AND ADOPTED by the City Council of the City of _____ _____ at a regular meeting thereof held on the ____ of _____, ____ by the following called vote:

AYES: Councilmembers:

NOES: Councilmembers:

ABSENT: Councilmembers

_____ Mayor of

the City of _____

Official Use

Job#_____

Permit#_____

PROJECT REVIEW CHECKLIST FOR
CONFORMANCE WITH LANDSCAPE REQUIREMENTS

Project Name:_____

Project Address:_____

Designer:_____

Address:_____

Contact:_____Phone:_____

Reviewed By:_____Date:_____

SUMMARY (Check one)

- o Approved
- o Changes Required

_____

_____

_____

PLAN CHECK REVIEW

APPLICABILITY (Check one)

- o Residential (single & multi-family)
- o Model Home or Temporary Development
- o Commercial
- o Industrial
- o Public Authority

PLANT SELECTION

1. Y N 90% of plants in non-turf areas require minimal water. Non-drought tolerant plants are grouped and irrigated separately.

TURF LIMITATIONS

1. Y N Turf and/or water area limited to 25% of the irrigated area.
   Type of turf used: _____
   Turf/water area: _____ square feet

   Y N Variance to turf/water area limitation granted.
   Reason for variance: _____

   _____

2. Y N No turf in median strips.
   Y N No turf where width is less than eight feet.

SOIL CONDITIONING AND MULCHING

1. Y N Minimum of six (6) cubic yards of nitrofied soil conditioner per 1,000 square feet incorporated into the top six inches of soil.

2. Y N Minimum of two (2) inches of mulch added in non-turf areas to the soil surface.

3. Y N Grading minimized to avoid disturbance.

IRRIGATION

1. Y N Sprinklers and sprays not used in areas less than eight (8) feet wide.

2. Y N Sprinkler heads with a precipitation rate of .85" per hour or less used on slopes exceeding 15% or on slopes exceeding 10% within 10 feet of hardscape.

3. Y N Valves and circuits separated based on water uses.

4. Y N Drip or bubbler irrigation systems used on trees.
   Y N Bubblers used that do not exceed 1.5 gallons per minute per device.

5. Y N Sprinkler heads have matched precipitation rates within each control valve circuit.

6. Y N Check valves on sprinkler heads where elevation differences will cause low head drainage.

7. Y N Sprinkler head spacing designed for head to head coverage.
   Y N Excessive runoff or overspray minimized.

8. Y N Controller has the potential for multiple programs, repeat cycles, and a flexible calendar.

9. Y N Irrigation system equipped with rain shut-off devices.

ADDITIONAL REQUIREMENTS

1. Y N Soil test submitted with plans.

2. Y N Water budget submitted with plans.
   Annual water use: _____ gallons.
   Irrigated area: _____ square feet.

Average water applied at a rate of _____ inches/year.

$$\frac{\_\_\_\_\_ \text{ gal/year}}{\_\_\_\_\_ \text{ sf.}} \cdot \frac{1 \text{ cu. ft.}}{7.48 \text{ gal.}} \cdot \frac{12 \text{ in.}}{1 \text{ ft.}} = \_\_\_\_\_ \text{ in/year}$$

Y N Is the average water applied at a rate of less than 75% of ET?

Inland ET is 37.5 inches - 75% of ET is 28 inches
Coastal ET is 24.5 inches - 75% of ET is 18 inches

Y N Monthly irrigation schedule acceptable for the establishment period.

Y N Monthly irrigation schedule acceptable for the following year.

INSTALLATION REVIEW

Y N The landscape was installed as designed.

If no, what is different?

- Plant selection.
- Turf/water area not limited to 25%.
- Turf in median strips.
- Turf in areas less than eight (8) feet wide.
- Soil not properly amended.
- Mulch not properly applied.
- Sprinklers and sprays used in areas less than eight (8) feet wide.
- Excessive precipitation rates used on slopes.
- Valves and circuits not separated based on water use.
- Drip or bubblers not used on trees.
- Valved circuits do not have matched precipitation rates.
- Check valves not used.
- Sprinklers do not have head to head coverage.
- Proper controller not installed.
- Rain shut-off device not properly installed.

COMMENTS

_____

_____

_____

_____

_____

CERTIFICATE OF COMPLIANCE

I have inspected _____
(Name of Project)

And certify that the installed landscape conforms with the approved plans and fulfills the Landscape Requirements of _____.
City or County

_____ _____
Landscape Architect Date

_____
License Number

Official Use

Job#_____

Permit#_____

SINGLE FAMILY RESIDENCE
PROJECT REVIEW CHECKLIST FOR
CONFORMANCE WITH LANDSCAPE REQUIREMENTS

Homeowner's Name:_____

Address:_____

Home Phone:_____Work:_____

Designer:_____

Address:_____

Contact:_____Phone:_____

Date:_____

SUMMARY (Check one)

- o Approved
- o Changes Required

_____

_____

_____

PLAN CHECK REVIEW

PLANT SELECTION

1. Y N 90% of plants in non-turf areas require minimal water. Non-drought tolerant plants are grouped and irrigated separately.

TURF LIMITATIONS

1. Y N Turf and/or water area limited to 25% of the irrigated area.
   Type of turf used: _____
   Turf/water area: _____ square feet

   Y N Variance to turf/water area limitation granted.
   Reason for variance: _____

   _____

SOIL CONDITIONING AND MULCHING

1. Y N Minimum of six (6) cubic yards of nitrofied soil conditioner per 1,000 square feet incorporated into the top six inches of soil.

2. Y N Minimum of two (2) inches of mulch added in non-turf areas to the soil surface.

3. Y N Grading minimized to avoid disturbance.

IRRIGATION

1. Y N Sprinkler heads with a precipitation rate of .85" per hour or less used on slopes exceeding 15% or on slopes exceeding 10% within 10 feet of hardscape.

2. Y N Valves and circuits separated based on water uses.

3. Y N Drip or bubbler irrigation systems used on trees.
   Y N Bubblers used that do not exceed 1.5 gallons per minute per device.

4. Y N Sprinkler heads have matched precipitation rates within each control valve circuit.

5. Y N Check valves on sprinkler heads where elevation differences will cause low head drainage.

6. Y N Sprinkler head spacing designed for head to head coverage.
   Y N Excessive runoff or overspray minimized.

7. Y N Controller has the potential for multiple programs, repeat cycles, and a flexible calendar.

8. Y N Irrigation system equipped with rain shut-off devices.

ADDITIONAL RECOMMENDATIONS

Turf

It is highly recommended that the homeowner use a drought tolerant turfgrass variety. Acceptable species include Tall Fescue, Dwarf Tall Fescue or Hybrid Bermuda.

Planting Design

Avoid the use of trees in turf.

Irrigation

Sprinklers and sprays should not be used in areas less than eight (8) feet wide.

INSTALLATION REVIEW

Y N The landscape was installed as designed.

If no, what is different?

- Plant selection.
- Turf/water area not limited to 25%.
- Soil not properly amended.
- Mulch not properly applied.
- Excessive precipitation rates used on slopes.
- Valves and circuits not separated based on water use.
- Drip or bubblers not used on trees.
- Valved circuits do not have matched precipitation rates.
- Check valves not used.
- Sprinklers do not have head to head coverage.
- Proper controller not installed.
- Rain shut-off device not properly installed.

COMMENTS

_____

_____

_____

_____

_____

CERTIFICATE OF COMPLIANCE

I have inspected _____
(Address of Residence)

And certify that the installed landscape conforms with the approved plans and fulfills the Landscape Requirements of

_____.
City or County

_____ _____
Homeowner Date